Work Item	
Work Item title:	Edge Deployment using ETSI MEC
Document Number	WI-0120
Date:	2024-04-24
Supporting Members or Partner type 2	Exacta GSS, Sejong University, SBS, FSCOM SARL
Abstract: |This work items aims to develop interworking |between oneM2M Service Layer and ETSI MEC.	

1 Title (Acronym)

Edge Deployment using ETSI MEC

2 Justification

Edge computing, an evolution of cloud computing, moves application and data hosting closer to users, improving latency and bandwidth efficiency, which are crucial for meeting the demanding Key Performance Indicators (KPIs) of 5G networks and other use cases. Beyond technical benefits, edge computing is transforming telecommunications into versatile service platforms for industries and specific customer segments.

IoT technology connects various devices to the internet, allowing them to communicate without human intervention. Originally used for user-oriented services in smart homes, IoT is now pervasive across various fields such as smart cities, factories, agriculture, and daily life. It has become an infrastructure technology for core technologies like artificial intelligence, cloud computing, blockchain, and edge computing, driving the fourth industrial revolution. IoT enables more accurate data collection for real-time operations in smart factories and high-speed communication for services like autonomous vehicles.

In the June 2023 ETSI White Paper No. #59, https://www.etsi.org/images/files/ETSIWhitePapers/ETSI-WP59-Enabling-Multi-access-Edge-Computing-in-iot.pdf, several options for deploying ETSI MEC and oneM2M are presented.

3 Intended Output

Tick all the appropriate cases

Check	Case
X	Change request(s) to existing Technical Specification(s)
	Change request(s) to existing Technical Reports(s)
X	New Normative Technical Specifications(s)
	New Permanent Technical Reports(s)
X	New Temporary Technical Reports(s)

4 Impact

4.1 oneM2M Work Items

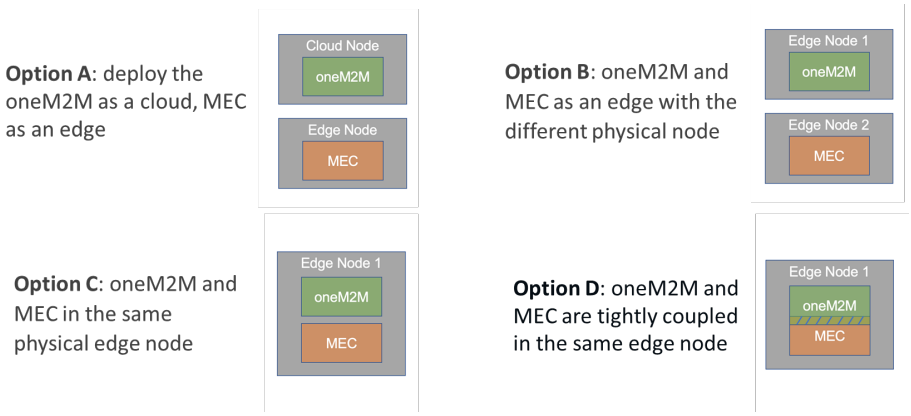
None

5 Scope

The scope of this work item is to enable interworking between oneM2M Service Layer and ETSI MEC. In particular, the main objective are as follows:

- Introduce ETSI MEC and its role in a oneM2M deployment.

- Identify what aspects of ETSI MEC API can be used from a oneM2M CSE.
- Identify how to deploy oneM2M to take advantage of MEC features and benefits. The figure below demonstrates some deployment options that will be considered.



missing caption

6 Schedule and impacted specifications

Provide the schedule of tasks to be performed;

Document Type	Document Number*	Title	Schedule (TP No.) Start	Schedule (TP No.) Change Control	Schedule (TP No.) Freeze	Schedule (TP No.) Approval	Lead WG	Impacted WGs	Comments
TR	TR-00xx	oneM2M and MEC integration scenario and mechanisms	TP#66	75	76	77	WG2		

Document Type	Document Number*	Title	Schedule (TP No.) Start	Schedule (TP No.) Change Control	Schedule (TP No.) Freeze	Schedule (TP No.) Approval	Lead WG	Impacted WGs	Comments
TS	TS-00xx	oneM2M and MEC interworking and deployments	TP#66	75	76	77	WG2		
TR	TR-00xx	Developer Guide: oneM2M and MEC deployment	TP#68	73	74	75	WG4		

- The first versions will be assigned by the secretariat (WPM Secretary)

Impacted TS/TR	CR number (when known)	Subject of the CR	Approved at plenary#	Impacted WGs	Comments
TR	TR-0001	Uses Cases	TP#77	WG2	
TS	TS-0001	Functional Architecture	TP#77	WG2	
TS	TS-0004	Service Layer Core Protocol	TP#77	WG2	
TS	TS-0018	Test and conformance	TP#77	WG4	

7 Work Item Rapporteur(s)

JaeSeung Song, Sejong University, jssong@sejong.ac.kr

Bob Flynn, Exacta GSS, bob.flynn@exactagss.com

8 History

Document history		
V0.0.1	2024-04-23	Initial proposal at TP#64
	2024-04-27	Uploaded as a permanent document following agreement of TP-2024-0035R02